

IN THE CLAIMS:

1. (Currently Amended) A method of communicating a mobile network code (MNC) from a mobile communications network to a mobile station for a wireless mobile communication, the method comprising:

transmitting, at a base station, a message comprising at least one of a first field and a second field including a least significant digit of the MNC, wherein the MNC has a first length or a second length, the first length is greater than the second length, and wherein the first field indicates whether the MNC has the first length or the second length, and
receiving, at the base station, a 15-digit International Mobile Station Identity (IMSI) constructed from an IMSI having fewer than 15 digits, wherein the 15-digit IMSI is padded with one or more zeros (0) for extending a length of the IMSI, having fewer than 15 digits, to 15 digits.

2. (Original) The method of claim 1, wherein the first field further indicates whether the second field is included in the message.

3. (Previously Presented) The method of claim 1, wherein when the network supports the MNC having the first length, the first field is set to a first logic level to indicate that the second field is included in the message.

4. (Currently Amended) The method of claim 1, wherein when the network supports the MNC having the second length, the second field is omitted in the message, and the first field is

set to a second logic level to indicate that the second field is not included in the message.

5. (Cancelled)

6. (Currently Amended) The method of claim 1 [[5]], wherein the least significant digit of the MNC is IMSI_10.

7. (Currently Amended) The method of claim 6, wherein the message further comprises a third field and most significant digits of the MNC are transmitted to the mobile station in [[a]] the third field.

8. (Original) The method of claim 7, wherein upon receiving the second field and the third field, the mobile terminal determines a first value of MNC supported by the network and compares the first value of MNC with a second value of MNC stored in the mobile terminal.

9. (Original) The method of claim 8, wherein if the first value is different from the second value then the mobile terminal is roaming.

10. (Original) The method of claim 1, wherein the message is sent over at least one of a paging channel and a broadcast control channel (BCCH).

11. (Original) The method of claim 10, wherein the message is an extended system parameters message (ESPM).

12. (Original) The method of claim 10, wherein the message is an ANSI-41 system parameters message (A41SPM).

13. (Original) The method of claim 10, wherein the message is a MC-RR parameters message (MCRRPM).

14. (Original) The method of claim 5, wherein value of the least significant digit of the MNC is determined based on an association between a decimal value and a binary value.

15. (Original) The method of claim 14, wherein the binary value comprises 4 bits.

16. (Currently Amended) A method of supporting mobile network code (MNC) having two length types in a mobile terminal for a wireless mobile communication, the method comprising:

a mobile station (MS) receiving a first value representing a mobile network code (MNC) of a first length from a network; and

the MS receiving a second value which identifies whether the a length of the MNC is equal to the first length or a second length which is greater than the first length, and

the MS adding padding bits to an International Mobile Station Identity (IMSI) having fewer than 15 digits to obtain a 15-digit padded IMSI; and

the MS transmitting the obtained 15-digit padded IMSI to a base station;

wherein if the second value is equal to a first logic level, the MS identifies the network supports the MNC having a length equal to the second length.

17. (Original) The method of claim 16, wherein the second value further indicates whether a third value is sent from the network,

and wherein if the second value is equal to the first logic level, the method further comprising:

receiving the third value from the network; and

determining the MNC value based on the first and third values.

18. (Original) The method of claim 16, wherein the first value comprises the most significant digits of the MNC.

19. (Original) The method of claim 17, wherein the third value comprises the least significant digit of the MNC.

20. (Previously Presented) The method of claim 17, further comprising:

comparing the determined MNC value with a stored MNC value to determine a roaming status.

21. ~ 26. (Cancelled)

27. (Previously Presented) The method of claim 1, wherein the mobile station is associated with an international mobile station identity (IMSI), wherein the IMSI comprising a mobile country code (MCC) field, a IMSI_11_12 field, and a IMSI_S field, wherein at least one of the IMSI_11_12 field and the IMSI_S field comprise the MNC, and wherein when the first field indicates that the length of the MNC is the first length, the network extracts a first part of the MNC from the IMSI_11_12 field and a second part of the MNC from a most significant position of IMSI_S field.

28. (Currently Amended) A method of extracting a mobile network code (MNC) from ~~an~~ a 15-digit international mobile station identity (IMSI) identifying a mobile station, the method comprising:

determining, at a base station, whether a length of the MNC is a first length which is greater than a second length based on a value of an indicator field included in a message transmitted from the mobile station;

reading, at the base station, first most significant digits of MNC from a first field of the IMSI;

reading, at the base station, least most significant digit of MNC from a most significant position of a second field of the 15-digit IMSI, when the indicator field is set to a first logic level; and

calculating, at the base station, the MNC based on values in the first and second fields of the 15-digit IMSI,

wherein, the 15-digit IMSI is transmitted from a the mobile station, and is generated from an IMSI having fewer than 15 digits by adding padding bits to the IMSI having fewer than 15

digits.

29. (Original) The method of claim 28, wherein the calculating comprises converting most significant digits of MNC from decimal to binary.

30. (Previously Presented) The method of claim 7, wherein the third field is an IMSI_11_12.